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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,075	06/09/2005	Kunihiro Fukuoka	0171-1212PUS1	8929

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EXAMINER	
COLE, ELIZABETH M	
ART UNIT	PAPER NUMBER
1798	

NOTIFICATION DATE	DELIVERY MODE
06/13/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/538,075	FUKUOKA ET AL.	
	Examiner	Art Unit	
	ELIZABETH COLE	1798	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 November 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-2,4-6, 8-27* is/are pending in the application.

4a) Of the above claim(s) *4,5 and 9* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-2, 6,8,10-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/15/09 has been entered.

Claim Rejections - 35 USC § 102/103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-2, 6, 8, 10, 24-27 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious English Machine Translation of JP 2002-115119 .

JP 2002-115119 is directed to a polyurethane elastic yarn used to create a knitted fabric for a stocking (Abstract).

JP 2002-115119 teaches a knitted fabric [0013] comprising a polyurethane elastic yarn made by a reaction between (A) a prepolymer with hydroxy groups on both ends obtained by reaction between a polyol, diisocyanate and a low molecular weight diol and (B) another prepolymer with isocyanate groups on both ends obtained by a reaction between a polyol and a diisocyanate (Abstract). The first and second polyols

can be made of one component, namely polyether glycol [0036 – 0039]; the Examiner equates this to Applicant's "wherein at least 50 wt % of the total polymeric diol is polyether diol". JP 2002-115119 notes that the yarn has outstanding heat setting abilities [0014 and 0074] and can be heat set using steam (wet heat setting) or hot wind (dry heat setting) [0005 and 0073] and maximum set temperature is determined by the temperature which maintains the aesthetics of the stocking [0005]. The polyurethane elastic yarn is covered by an inelastic thread such as a nylon filament using a single covering process or double covering process [0056]. After knitting the covered yarns, the knitted fabric is dyed and heat set [0119 – 0122]. The Examiner submits that the heat setting would cause the yarns to be thermally fused together at the cross-over points as required by Applicant. As the covered yarn would be present in every loop, the Examiner equates this to Applicant's plating at every loop.

JP 2002-115119 teaches that the molecular weight of the first and second polymer diol is 600 – 3000 [0037] and the low molecular weight diol has a molecular weight of 500 or less [0045].

JP 2002-115119 teaches that the mole ratio of all the molar quantity of diisocyanate to the total molar quantity of the whole polymer diol and the low molecular weight diol is 1.03 - 1.18 [0049]. Additionally, the amount of diisocyanate that remains in the just spun filaments or NCO% is 0.3 to 1.2 mass % [0053].

JP 2002-115119 teaches that the first and second polyol can comprise the same material such as polyether glycol [0036 - 0042]. JP 2002-115119 teaches that the polyurethane elastic yarn has a linear density of 22 dtex (see Working Example 1, [0077

- 0089]). In working examples 4 – 6, the polyurethane elastic yarn of Working Example 1 was combined with an inelastic nylon filament yarn of 11dtex/5 filaments (9.9 denier/5 filaments) [0119].

JP 2002-115119 teaches that the polyurethane elastic yarn is covered by an inelastic thread such as a nylon filament using a single covering process or double covering process [0056]

JP 2002-115119 does not indicate that the fabric edges are treated, therefore, the Examiner submits that JP 2002-115119 teach a fabric with untreated edges as required by Applicant.

JP 2002-115119 teaches the claimed invention above but fails to teach the retention of tenacity of at least 50% following dry heat treatment under 100% extension at 150 degrees C for 45 seconds, a melting point of 150 – 180 degrees C, and at least 60% retention of tenacity following treatment in 2 g/L aqueous sodium hydroxide solution under 100% extension at 100 degrees C for 60 minutes. It is reasonable to presume that the above properties are inherent to JP 2002-115119. Support for said presumption is found in the use of like materials (i.e. a knit fabric having similar filament sizes comprising an inelastic yarn plated with a polyurethane yarn where the polyurethane is made by reacting a both ended isocyanate-terminated prepolymer prepared by the reaction of a polyol and a diisocyanate with a both end hydroxyl-terminated prepolymer prepared by the reaction of a polyol, a diisocyanate and a low molecular weight diol, wherein at least 50wt% of the starting polyol is a polyether polyol and the low molecular weight diol is different from the first and second polyol, where the

molar ratio of the diisocyanate to the polyols and diol is 1.03 - 1.18 and the amount of diisocyanate that remains in the just spun filaments or NCO% is 0.3 to 1.2 mass %) which would result in the claimed properties. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed properties would obviously have been present once the JP 2002-115119 in view of the paper product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977)..

Absent a showing to the contrary, it is the examiner's position that the article of the applied prior art is identical to or only slightly different than the claimed article. Applicant claims dry heat setting the plated structure at a temperature of 140 to 200 degrees C for 10 seconds to 3 minutes while JP 2002-115119 only discusses the use of wet or dry heat setting in a general fashion and Applicant claims melt spinning without prior solidification. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289 (Fed. Cir. 1983). The applied prior art either anticipated or strongly suggested the claimed subject matter. It is noted that if the applicant intends to rely on Examples in the specification or in a submitted

declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with the applied prior art.

3. Claims 11-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over English Machine Translation of JP 2002-115119 in view of Laycock et al. (U.S. Patent No. 6,776,014). JP ' 119 teaches the claimed invention as set forth above, but does not specifically disclose the claimed fabric structures as set forth in claims 11-23. Laycock et al teaches that it is known to form knitted garments from a combination of elastic yarns such as polyurethane yarns as well as "hard" or non-elastic yarns. Laycock teaches that it is known to form such fabrics so that they comprise an elastic yarn in every course, or in alternating courses. Laycock teaches that it is known to form such garments with both bare and covered elastic strands. Laycock teaches that it is known to form such garments wherein the elastic yarns are plaited or knitted in. See the background of the invention section in Laycock, at col. 1, line 13 - col. 3, col. 4, line 39. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the elastic yarns as disclosed by JP '119 to form various known knitted fabric structures as taught by Laycock.

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory

obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-2, 6, 8, 10-27 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-4, 9-10, 12-17, 19-21 of copending Application No. 11/628,759. Although the conflicting claims are not identical, they are not patentably distinct from each other because each claims a

fabric comprising the claimed elastomeric polyurethane fibers heat set and bonded to other non elastic fibers or to themselves.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Applicant's arguments have been fully considered but are moot in view of the new grounds of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

The examiner's supervisor Angela Ortiz may be reached at (571) 272-1206.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.

/Elizabeth M. Cole/
Primary Examiner, Art Unit 1798